RX1: Wireless Receiver V1.0

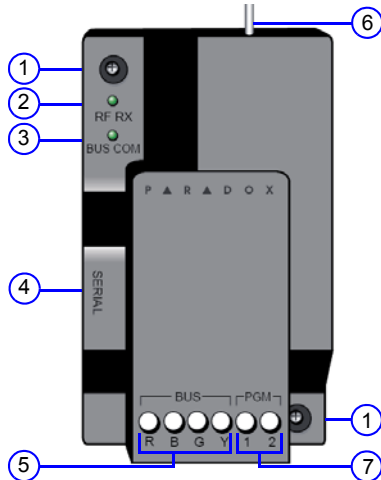**P A R A D O X**®
SECURITY SYSTEMS

Description

The RX1 Wireless Receiver adds wireless receiving capability to the E55 and SP Series panels (V5.0 and higher). Adding the RX1 to an installation allows for the use of REM1/RAC1 remotes as well as wireless one-way zone transmitters (SP Series only) with the system.

Features

- Up to 32 remote controls
- Up to 32 wireless zones (SP Series only)
- 2 PGM outputs follow buttons 1 and 2 on REM1/RAC1 (also programmable through control panel)
- 4-wire bus connection
- Feedback LEDs (Bus / RX)
- In-field firmware upgradable
- Compact design
- RF jamming supervision
- Low battery, tamper and check-in supervision
- Transmitter signal strength display

Overview

1. Mounting holes
2. RF RX LED
3. Bus communication LED
4. Serial connection
5. Bus connection
6. Antenna
7. PGM connection

Specifications

Power input voltage:	12Vdc
Frequency:	433MHz or 868MHz
Sensitivity:	-110dBm (433MHz) or -106dBm (868MHz)
Current consumption:	25mA
Dimensions (no antenna):	5.1cm x 8.3cm x 2cm (2in x 3.25in x 0.78in)
Operating temperature:	0ºC to 50ºC (32ºF to 122ºF)
PGM outputs:	PGM1 and PGM2 - via PGM 13 and 14 of panel
Compatibility:	• E55 / SP Series control panels V5.0 and higher • REM1 / RAC1 remote controls • DCT10 / DCTXP2 / DCT2 door contacts (SP Series only) • PMD1P / PMD75 / PMD85 motion detectors (SP Series only) • SD738 smoke detector (SP Series only)
Antenna:	Monopole antenna; Error correction algorithm

Location

The location of the RX1 affects its performance. In order to ensure the best possible signal reception, the following list of location criteria should be respected:
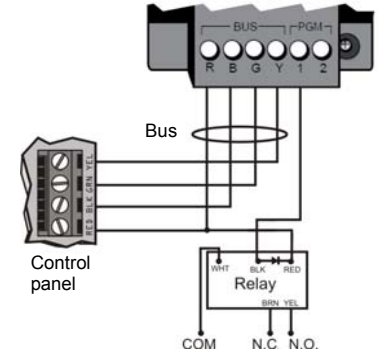
- Select an installation site that is free of obstacles that reflect and absorb radio frequency (RF) signals, as well as interference that may distort signals. Avoid installation near or in the path of strong RF fields (e.g., neon lights, computers), on or near metal objects, circuit breaker boxes, air conditioners, or heating ducts since they may cause interference and reduce the module's sensitivity.
- Mount the RX1 as high as possible.
- Avoid mounting the RX1 in the basement as the range of the module is reduced when mounted below ground level. If it is absolutely necessary to mount the module in the basement, mount the module as high and as close to the underside of the first floor as possible.

Installation

Only one RX1 module can be connected to an E55 or SP Series panel (V5.0 and higher).

To connect the RX1 to the control panel:

1. Straighten the RX1 antenna for maximum reception.
2. Create a 4-wire bus connection to the control panel, as shown.
3. If the current draw exceeds 150mA on PGM1 or PGM2, use a relay.
   To add a relay, connect the RX1's "R" terminal to the relay's "RED" terminal. Connect the PGM terminal (PGM1 or PGM2) to the relay's BLK terminal.

LED Feedback

Legend			
G = Green	○ = Off	◉ = On	☼ = Flashing

LED State		Condition
RF RX	☼G	Receiving RF signal
RF RX	G	RF jamming
BUS COM	☼G	Communicating on bus
BUS COM	○	No power / bus trouble*

*Possible causes: GRN/YEL short, GRN/YEL reverse, communication failure, too many modules, bus power too low

Programming

When connected to a SP Series or E55 system, the RX1 settings are programmed in the control panel. Refer to the panel's *Programming Guide.*The following control panel programming sections apply to program wireless devices (**bold** = default):

Section	Description
[061] - [092]	Wireless serial numbers
[101] - [132]	Wireless transmitter signal strength
[610] - [642]	Remote control button assignment
[651] - [682]	Remote control user assignment

[705]		Supervision Options	
[6]	[7]	RF Zone Supervision Options	Keypad / Bus Module Supervision Options
Off	Off	Disabled	Disabled
Off	**On**	**Trouble only**	**Trouble only**
On	Off	Disarmed: trouble only Armed: follow zone's alarm type	Trouble only
On	On	Disarmed: audible alarm Armed: follow zone's alarm type	Audible alarm

[706]	General Zone Options		
Option		OFF	ON
[1]	Check-in supervision time	☐ **24 hours**	☐ 80 minutes

NOTE: Record the serial number of wireless modules to be used with the RX1.

Onboard PGMs

The RX1 includes two on-board PGMs which follow buttons 1 and 2 on REM1/RAC1 remote controls. PGMs are also programmable and appear as PGMs 13 and 14 in the SP Series or E55 panel (V5.0 and higher). Refer to the panel's *Programming Guide* for instructions on PGM programming.